



January 17, 2022

THB The District LLC  
1875 Lawrence Street  
Suite 900  
Denver, Colorado 80202

Attn: Mr. Brodie Smith

Re: The District – Parcel 6  
SWC Mineral Avenue and Dayton Street  
Traffic Compliance Letter  
Centennial, Colorado

Dear Mr. Smith:

The purpose of this letter is to provide a trip generation comparison to identify conformance with the original Jones District Redevelopment traffic study for the portion of The District – Parcel 6 development located on the southwest corner of the Mineral Avenue and Dayton Street intersection in Centennial, Colorado. The *Jones District Redevelopment Traffic Impact Study* was completed in July 2019. The location of current project was previously evaluated as areas 6B and 7B in the original traffic study which was studied to include 320,252 square feet of office space and 17,200 square feet of retail space. The current proposal is anticipated to include 36 townhomes. This letter will compare the trips generated by the currently proposed The District – Parcel 6 project to the land uses in the same development area evaluated previously in the *Jones District Redevelopment Traffic Impact Study*.

#### **Site Information and Trip Generation Comparison**

The District – Parcel 6 is proposed to contain 36 townhomes. The project site was previously evaluated with office and retail space. The overall Jones District Redevelopment area was evaluated with 3,000,000 square feet of office space. Within this specific development area, 320,252 square feet of office space was evaluated in the original traffic study. As such, the originally studied office use for the overall development was prorated to 10.6 percent and was compared with development of the proposed townhomes. Additionally, the 17,200 square feet of retail space previously evaluated to occur within this development area was also compared to The District – Parcel 6 development. Therefore, the purpose of this section is to summarize a comparison of the trip generation from the proposed The District – Parcel 6 site to the originally studied office and retail uses identified for this specific site.

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*<sup>1</sup> published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses.

Trip generation for the currently proposed land use was calculated using the 11<sup>th</sup> Edition average rates for single-family attached housing (ITE Code 215). Trip generation for the original traffic study was calculated using the 10<sup>th</sup> Edition (most current at that time) fitted curve equations for general office building (ITE Code 710) and the average rates for shopping center (ITE Code 820). The following **Table 1** compares the trip generation from the original study compared to the expected trip generation for the proposed The District – Parcel 6 project. The trip generation calculation sheets from the original traffic study, as well as from the current proposal are attached for reference.

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<sup>1</sup> Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

**Trip Generation Comparison: Original Study vs. Current Proposal**

Use and Size	Daily Vehicle Trips	Weekday Vehicle Trips					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
<b>Original Traffic Study – Jones District Redevelopment</b>							
Pro-Rated Office (ITE 710) - 320,252 Square Feet	3,046	260	43	503	49	257	306
Shopping Center (ITE 820) - 17,200 Square Feet	650	10	6	16	32	34	66
<b>Total Trip Generation</b>	<b>3,696</b>	<b>270</b>	<b>49</b>	<b>319</b>	<b>81</b>	<b>291</b>	<b>372</b>
<b>Current Proposal – The District – Parcel 6</b>							
Single Family Attached Housing (ITE 221) – 36 Units	260	4	13	17	12	9	21
<b>Net Difference in Trips</b>	<b>-3,436</b>	<b>-266</b>	<b>-36</b>	<b>-302</b>	<b>-69</b>	<b>-282</b>	<b>-351</b>


As summarized in the table, the currently proposed The District – Parcel 6 project is anticipated to generate 260 daily weekday trips with 17 trips occurring during morning peak hour and 21 trips occurring during the afternoon peak hour per current ITE equations and data. Based on the original Jones District Redevelopment traffic study assuming development of 320,252 square feet of office space and 17,200 square feet of retail space within this exact same development area, The District – Parcel 6 project is anticipated to generate traffic within the volume limits previously studied. The proposed development is anticipated to account for a significant decrease in traffic of approximately 3,436 daily trips, a decrease of approximately 302 trips in the morning peak hour, and a decrease of approximately 351 trips in the afternoon peak hour.

**Conclusions**

In summary, this traffic study letter provides a trip generation comparison to the original study for The District – Parcel 6 development. Based on the results of this trip generation comparison, development of the 36 townhomes on the southwest corner of the Mineral Avenue and Dayton Street intersection is in traffic compliance with the original traffic study. Therefore, The District – Parcel 6 project will not change the results or conclusions of the original traffic study, as this proposed use generates significantly less traffic than the office and retail space originally studied for the same development area. Therefore, the proposed The District – Parcel 6 project is in traffic compliance with the original Jones District Redevelopment Traffic Impact Study, prepared by Kimley-Horn in July 2019, which included this development area. It is believed that all potential traffic impacts with the proposed project have been previously addressed within the original traffic impact study. Please let us know if you have any questions or require anything further.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

  
Curtis D. Rowe, P.E., PTOE  
Vice President



## Trip Generation Calculations

Project The District - Parcel 6  
 Subject Trip Generation for Single-Family Attached Housing  
 Designed by TES Date January 17, 2022 Job No. 196394000  
 Checked by \_\_\_\_\_ Date \_\_\_\_\_ Sheet No. \_\_\_\_\_ of \_\_\_\_\_

## **TRIP GENERATION MANUAL TECHNIQUES**

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Single-Family Attached Housing (215)

Independent Variable - Dwelling Units (X)

$$X = 36$$

T = Average Vehicle Trip Ends

### **Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 239)**

Average Weekday	Directional Distribution:	26% ent.	74% exit.
(T) = 0.48(X)	T = 17	Average Vehicle Trip Ends	
(T) = 0.48 * (36.0)	4 entering	13 exiting	
	4 + 13 = 17		

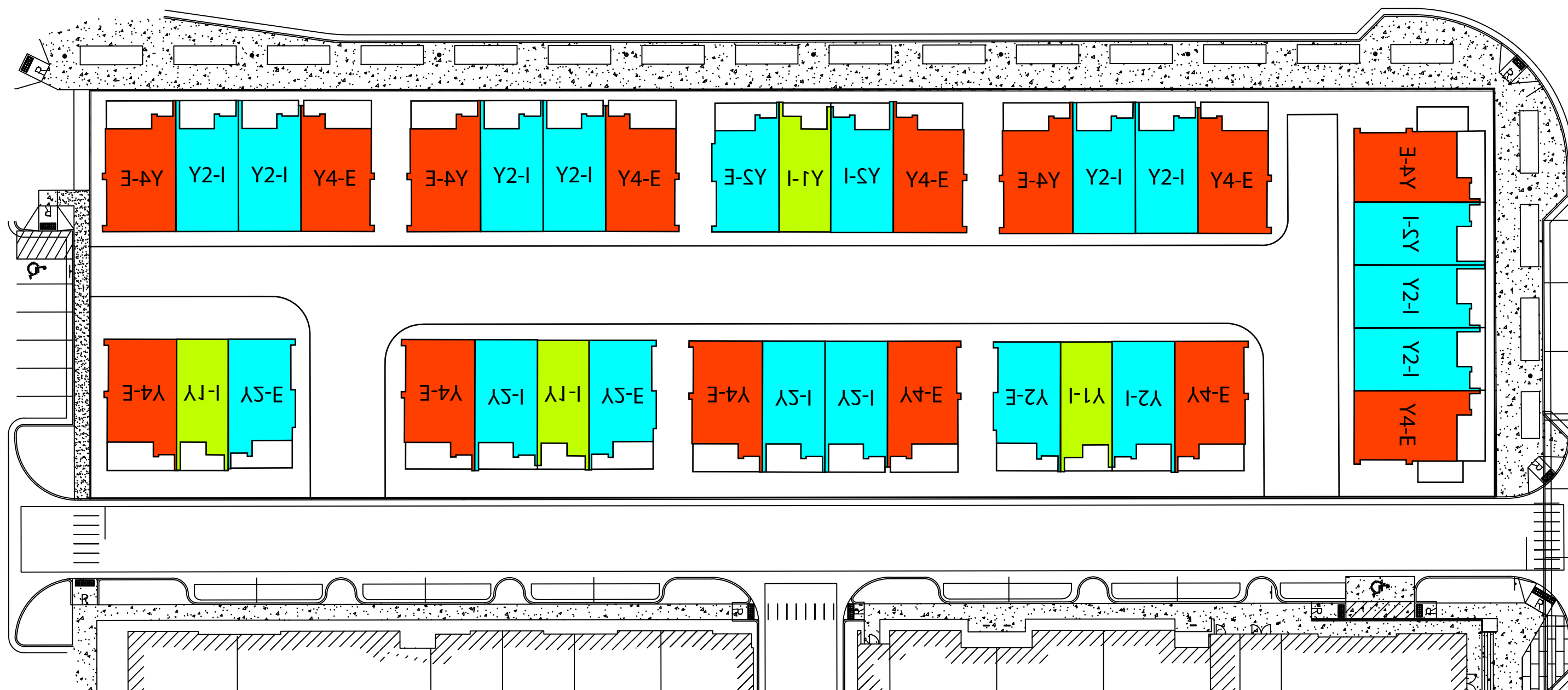
### **Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 240)**

Average Weekday	Directional Distribution:	57% ent.	43% exit.
(T) = 0.57 (X)	T = 21	Average Vehicle Trip Ends	
(T) = 0.57 * (36.0)	12 entering	9 exiting	
	12 + 9 = 21		

### **Weekday (200 Series Page 238)**

Average Weekday	Directional Distribution:	50% ent.	50% exit.
(T) = 7.20 (X)	T = 260	Average Vehicle Trip Ends	
(T) = 7.20 * (36.0)	130 entering	130 exiting	
	130 + 130 = 260		

## Conceptual Site Plan



## Original Traffic Study Documents



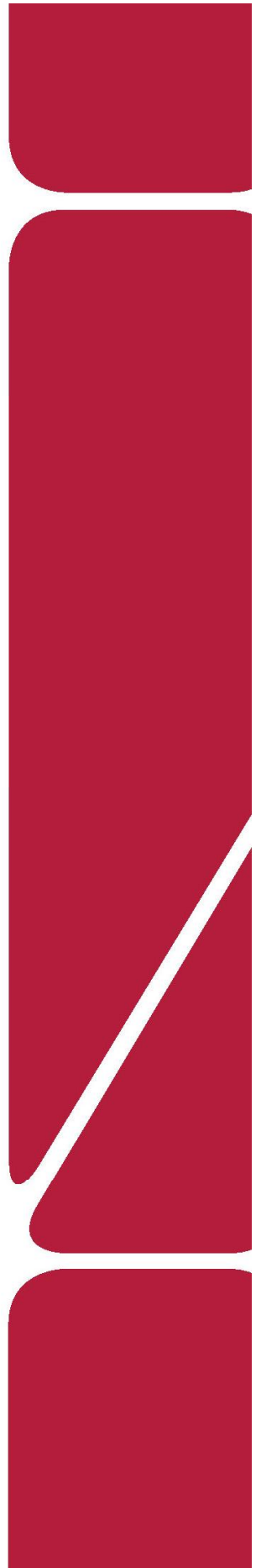
Traffic Impact Study

# Jones District Redevelopment Centennial, Colorado

Prepared for:

Brue Baukol Capital Partners, LLC

**Kimley»Horn**





Since the Jones District Redevelopment is proposed to contain a mix of uses and to be a walkable area, internal capture trips are expected to occur on site as well. These internal capture trips are shared trips from vehicles already within the internal street network. These shared trips reduce the number of total external trips and were calculated directly per the ITE procedure.

Jones District Redevelopment is expected to generate approximately 28,556 daily weekday external vehicle trips with 2,640 of these trips occurring during the morning peak hour and 2,859 of these trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Handbook*, 3<sup>d</sup> Edition, 2017. **Table 1** summarizes the estimated trip generation for the proposed development. Trip generation worksheets are included in **Appendix C**.

**Table 1 – Jones District Redevelopment Project Traffic Generation**

Land Use and Quantity	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Total Site Generated Trips							
Mid-Rise Residential with 1 <sup>st</sup> -Floor Retail (ITE 231) – 1,500 Units	5,160	126	324	450	378	162	540
Hotel (ITE 310) – 200 Rooms	1,832	56	39	95	63	61	124
Office (ITE 710) – 3,000,000 Square Feet	28,744	2,448	398	2,846	461	2,420	2,881
Shopping Center (ITE 820) – 75,000 Square Feet	2,832	44	27	71	137	149	286
Total Site Generated Trips	38,568	2,674	788	3,462	1,039	2,792	3,831
Net Trips after TOD Reduction (20%)	30,854	2,139	630	2,770	831	2,234	3,065
Net External Trips after TOD and Internal Capture	28,556	2,074	565	2,640	728	2,131	2,859

## 4.2 Trip Distribution

Distribution of project traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding development areas, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given

Project Jones District Redevelopment  
 Subject Trip Generation for Office Building  
 Designed by JRP Date April 24, 2019 Job No. 096833000  
 Checked by \_\_\_\_\_ Sheet No. 1 of 1

## **TRIP GENERATION MANUAL TECHNIQUES**

ITE Trip Generation Manual 10th Edition, Fitted Curve Equations

Land Use Code - General Office Building (710)

Independent Variable - 1000 Square Feet (X)

SF = 3,000,000

X = 3000.000

T = Average Vehicle Trip Ends

### **Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (700 Series Page 4)**

$T = 0.94 (X) + 26.49$ $T = 0.94 * (3000.0) + 26.49$	Directional Distribution: 86% ent. 14% exit. T = 2846 Average Vehicle Trip Ends 2448 entering 398 exiting  $2448 + 398 = 2846$
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### **Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (700 Series Page 5)**

$\ln(T) = 0.95 \ln(X) + 0.36$ $\ln(T) = 0.95 * \ln(3000.0) + 0.36$	Directional Distribution: 16% ent. 84% exit. T = 2881 Average Vehicle Trip Ends 461 entering 2420 exiting  $461 + 2420 = 2881$
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### **Weekday (700 Series Page 3)**

Average Weekday $\ln(T) = 0.97 \ln(X) + 2.50$ $\ln(T) = 0.97 * \ln(3000.0) + 2.50$	Directional Distribution: 50% entering, 50% exiting T = 28744 Average Vehicle Trip Ends 14372 entering 14372 exiting  $14372 + 14372 = 28744$
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Project Jones District Redevelopment  
 Subject Trip Generation for Shopping Center  
 Designed by JRP Date April 24, 2019 Job No. 096833000  
 Checked by \_\_\_\_\_ Date \_\_\_\_\_ Sheet No. 1 of 1

## **TRIP GENERATION MANUAL TECHNIQUES**

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Shopping Center (820)

Independant Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = **75,000** Square Feet

X = 75.000

T = Average Vehicle Trip Ends

### **Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 139)**

Average Weekday	Directional Distribution:	62% ent.	38% exit.
T = 0.94 * (X)	T = 71	Average Vehicle Trip Ends	
T = 0.94 * 75	44 entering	27 exiting	
	44 + 27 = 71		

### **Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series page 140)**

Average Weekday	Directional Distribution:	48% ent.	52% exit.
T = 3.81 * (X)	T = 286	Average Vehicle Trip Ends	
T = 3.81 * 75	137 entering	149 exiting	
	137 + 149 = 286		

### **Weekday (800 Series page 138)**

Average Weekday	Directional Distribution:	50% entering, 50% exiting
T = 37.75 * (X)	T = 2832	Average Vehicle Trip Ends
T = 37.75 * 75	1416 entering	1416 exiting
	1416 + 1416 = 2832	

### **Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017-Page 190)**

AM Peak Hour =	66%	Non-Pass By	PM Peak Hour =	66%	Non-Pass By
	IN	Out	Total		
AM Peak	29	18	47		
PM Peak	90	98	189		
Daily	935	935	1870	PM Peak Hour Rate Applied to Daily	

### **Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017 -Page 190)**

AM Peak Hour =	34%	Pass By	PM Peak Hour =	34%	Pass By
	IN	Out	Total		
AM Peak	15	9	25		
PM Peak	47	51	97		
Daily	481	481	962	PM Peak Hour Rate Applied to Daily	

Project Jones District Redevelopment  
 Subject Trip Generation for Shopping Center  
 Designed by TES Date January 17, 2022 Job No. 096833000  
 Checked by \_\_\_\_\_ Date \_\_\_\_\_ Sheet No. \_\_\_\_\_ of \_\_\_\_\_

## **TRIP GENERATION MANUAL TECHNIQUES**

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Shopping Center (820)

Independant Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 17,200 Square Feet

X = 17.200

T = Average Vehicle Trip Ends

### **Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 139)**

Average Weekday	Directional Distribution:	62% ent.	38% exit.
T = 0.94 * (X)	T = 16	Average Vehicle Trip Ends	
T = 0.94 * 17.2	10 entering	6	exiting
	10 + 6 = 16		

### **Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series page 140)**

Average Weekday	Directional Distribution:	48% ent.	52% exit.
T = 3.81 * (X)	T = 66	Average Vehicle Trip Ends	
T = 3.81 * 17.2	32 entering	34	exiting
	32 + 34 = 66		

### **Weekday (800 Series page 138)**

Average Weekday	Directional Distribution:	50% entering, 50% exiting
T = 37.75 * (X)	T = 650	Average Vehicle Trip Ends
T = 37.75 * 17.2	325 entering	325 exiting
	325 + 325 = 650	

### **Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017-Page 190)**

AM Peak Hour = 66% Non-Pass By	PM Peak Hour = 66% Non-Pass By
IN Out Total	
AM Peak 7 4 11	
PM Peak 21 22 44	
Daily 215 215 430	PM Peak Hour Rate Applied to Daily

### **Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017 -Page 190)**

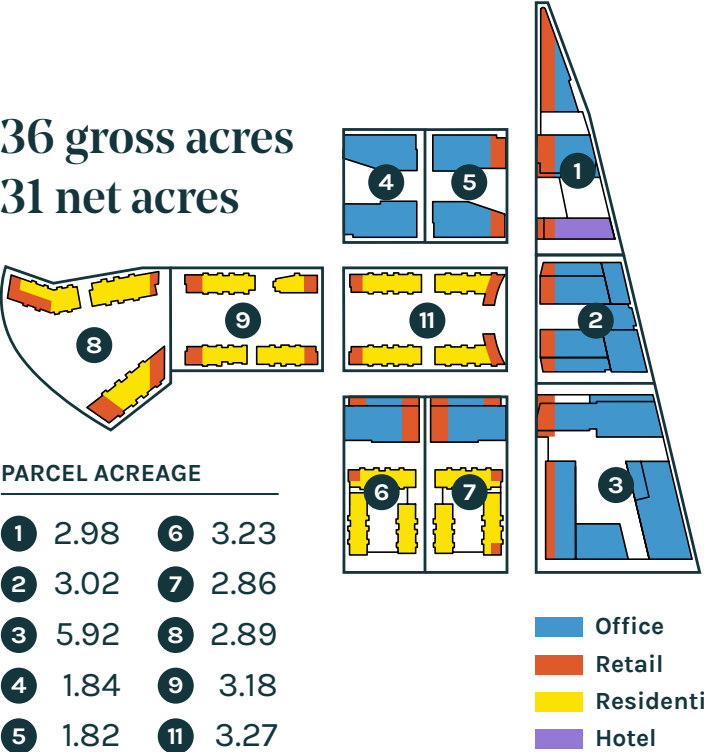
AM Peak Hour = 34% Pass By	PM Peak Hour = 34% Pass By
IN Out Total	
AM Peak 3 2 6	
PM Peak 11 12 22	
Daily 110 110 220	PM Peak Hour Rate Applied to Daily



# A Walkable, Mixed-Use Community

Jones District will be a distinct urban node defined by high-quality, active pedestrian streets, diverse amenities, inviting open spaces and stunning mountain views. A variety of commercial and residential developments will enjoy a dynamic urban environment and flexible building opportunities.

36 gross acres  
31 net acres





# Flexible Development Opportunities

OFFICE		LEVELS	RETAIL SF	OFFICE SF
1A	Station Gateway	15	10,912	283,718
1B	Station Gateway	11	4,855	258,821
2	Jones Plaza	8-13	9,770	512,804
3	Office Campus	5-15	16,136	951,236
4	Office Campus	5	-	248,710
5	Station Gateway	6	6,904	291,548
6B	Mineral Ave	6	6,829	161,897
7B	Mineral Ave	6	10,371	158,355
			65,777	2,867,089

HOTEL	LEVELS	RETAIL SF	HOTEL KEYS
1C Boutique Hotel	10	9,670	200

RESIDENTIAL		LEVELS	RETAIL SF	UNITS
6A	Courtyard Res	5-7	1,587	240
7A	Courtyard Res	5-7	3,190	240
8	Mountain View	7-12	18,919	434
9	Mountain View	5-10	18,145	287
11	Mountain View	5-7	16,273	267
			58,114	1,468

